

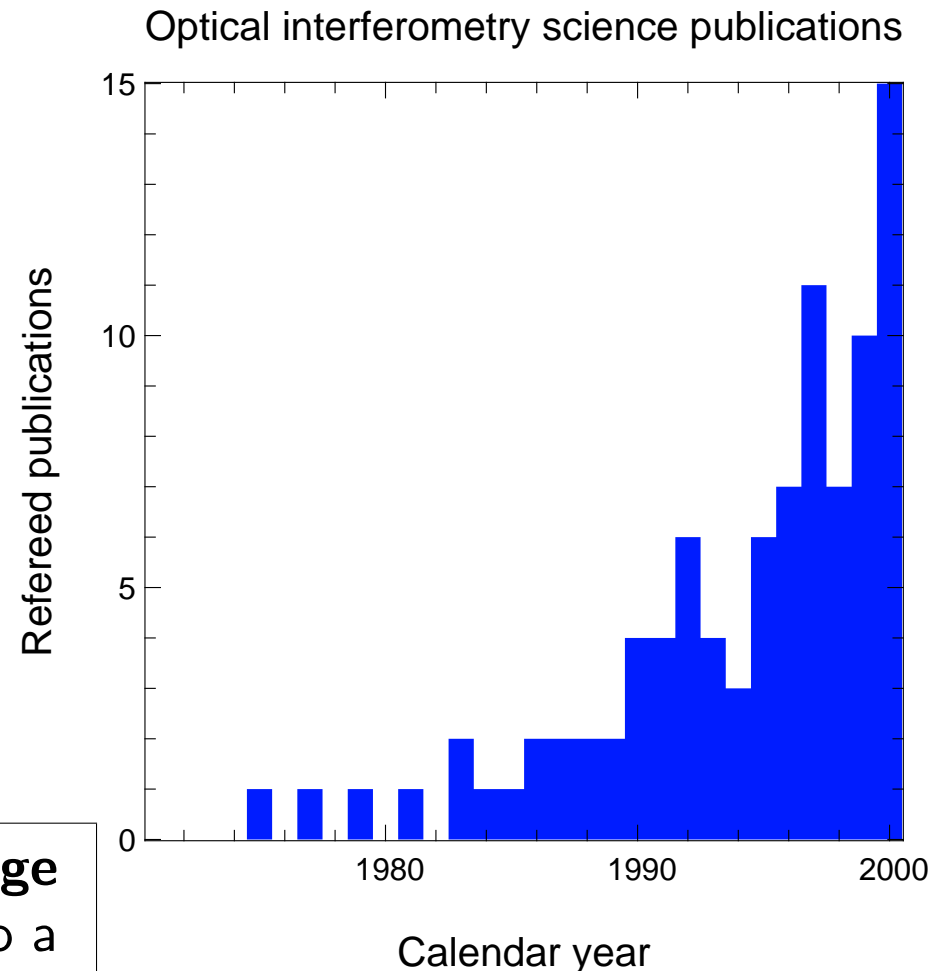
Interferometry today

Science topics:

- stellar parameters (R , T_{eff} , ...)
- shells of late-type stars
- Be/P Cyg shells
- binary star orbits
- stellar atmosphere
- young stellar objects
- novae
- cepheids
- ...

With only 6-7 “**small**” interferometers.

Q: what will be the trend with **large** and **automated** arrays, opened to a **wide** community?



adapted from Ridgway, in Michelson 1999 Summer School

What type of science?

- science objectives depends on instrument design and hardware
 - ★ 2-tel. visibility measurements
 - ★ N -tel. imaging
 - ★ wide- and narrow-angle astrometry
 - ★ nulling
 - ⇒ diversity vs dispersion of the efforts
- flux sensitivity is a major issue
 - ★ increase the volume of investigation (stars → galaxies)
 - ★ sophisticated instruments (polarization, high spectral dispersion, high dynamic,...) requires photons.
- depends on instrument efficiency
 - ★ degree of automation
 - ★ proportion of overheads
 - ⇒ opens the door to statistical studies
- angular resolution vs field of view (compact/extended objects)
 - ⇒ multi-scale observations

Personal point of view

- No doubts that the science results will still increase
- However efforts should be made to **increase the sensitivity** and to **reduce the overheads**
- We should discuss *new observing modes* versus *science productivity*

Suggestion:

Maybe we should specialize the interferometers / instruments and increase the collaborations by exchanging:

- ★ observing time
- ★ data of various type
- ★ models